

AMENDMENTSIn the Specification

Delete the paragraph starting on line 2 and ending on line 12 of page 3 and replace such paragraph with the following:

A1
One aspect of the invention is directed to a method of modifying an existing telephone network. Interface devices serve various geographic regions of the telephone network. The interface devices are coupled to the telephone network. The interface devices are coupled to circuitry coupled to radio transceivers that service mobile subscribers that may be located in ones one of the geographic regions. The mobile subscribers are each assigned to a respective geographic region. When a subscriber is located in a region other than the geographic region to which the subscriber is assigned, circuitry coupled to the interface devices routes a call with a mobile subscriber through a path including a radio transceiver that serves the region in which the mobile subscriber is currently located and an interface device that serves the region to which the subscriber is assigned.

Delete the paragraph starting on line 22, page 3 and ending on line 5, page 4 and replace such paragraph with the following:

A2
Another embodiment of the present invention is directed to a communications system that includes a set of interfaces adapted to be coupled to a public switched telephone network (PSTN). The interfaces are configured to serve various geographic regions. For communication between the PSTN and a subscriber located in a region other than a region in which an interface to which the subscriber is assigned is located, circuitry included by the system and coupled to the set of interfaces causes the communication to take place via the interface to which the subscriber is assigned. According to one embodiment ~~to~~ of the invention, the circuitry coupled to the set of

A2 interfaces is coupled to the interfaces via an E1 interface. According to one embodiment of the invention, communication between a circuitry coupled to the set of interfaces and the subscriber takes place entirely over a land line system.

Delete the paragraph starting on line 15, page 4 and ending on line 25, page 4 and replace such paragraph with the following:

A3 Another aspect of the invention is directed to a method of modifying an existing telephone network in which interface devices are located in various geographic regions of the telephone network. The interface devices are coupled to the telephone network in the various geographic regions. The interface devices are coupled to circuitry coupled to radio transceivers that service mobile subscribers that may be located in ~~ones~~ one of the geographic regions. The mobile subscribers are each assigned to a respective geographic region. When a subscriber is located in a region other than the geographic region to which the subscriber is assigned, circuitry coupled to the interface devices routes a call with a mobile subscriber through a path including a radio transceiver in the region in which the mobile subscriber is currently located and an interface device in the region to which the subscriber is assigned.

Delete the paragraph starting on line 4, page 8 and ending on line 15, page 8 and replace such paragraph with the following:

A4 Circuitry ATC₁ 114 couples the various interface devices (NIU_A 111, NIU_B 112, and NIU_C ~~[[113]]~~ 113). Circuitry ATC₁ 114 may be implemented in the form of dedicated circuits, or a computerized system. Typically, circuitry ATC₁ 114 includes bearer channels and control channels. E1 links are provided to interconnect the various interface devices via ATC₁ 114. Circuitry that routes calls between interface devices, circuitry ATC as shown in Fig. 1, may be implemented as a computer system. The ATC circuitry acts as a controller and includes an E1

A4
interface. The circuitry ATC includes bearer and control circuitry. The bearer circuitry provides a path for transmission of information, such as voice from a subscriber, to the correct interface. Such transmission typically occurs over an E1 interface. The circuitry that routes between the interfaces (e.g., ATC) includes a cross connect, which is a split that maps between various incoming and outgoing lines. An ATC may have, in one example, 30 multiplexed lines.

Delete the paragraph starting on line 16, page 8 and ending on line 21, page 8 and replace such paragraph with the following:

A5
An interface device, shown in FIG. 1 as, for example, NIUA 111, may be implemented as a computer with controllers. The interface device includes interface boards for interfacing with radio port controllers (e.g., RPCA1 115). Such interfacing takes place typically via an E1 standard. The interface from the interface device to the PSTN (PSTN 110) may take place via an analog, T1 interface, or other interface. The interface device is typically coupled to a class 5 switch in the PSTN. The system may include circuitry coupled to the set of interfaces that converts a signal from the subscriber to packets before passing the signal to the PSTN.

Delete the paragraph starting on page 8, line 22 and ending on page 9, line 4 and replace such paragraph with the following:

AL6
According to one embodiment of the invention, an interface device can have a large number of subscribers assigned to it, e.g., 10,000 subscribers, and a large number of roaming subscribers. According to one embodiment of the invention, subscribers are registered in a particular home interface device for billing purposes and because of telephone number assignment to the particular PSTN ports to which the home interface device is connected. The sizing of connectivity between interface devices and circuitry ATCs is determined by the amount of roaming traffic between respective interface devices and the desired grade of service for such